

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Mitsumi KIMURA et al.

Group Art Unit: 2871

Application No.: 09/077,029

Examiner: A. Schechter

Filed: May 18, 1998

Docket No.: JAO 40499

For: MATRIX TYPE DISPLAY DEVICE AND MANUFACTURING METHOD THEREOF

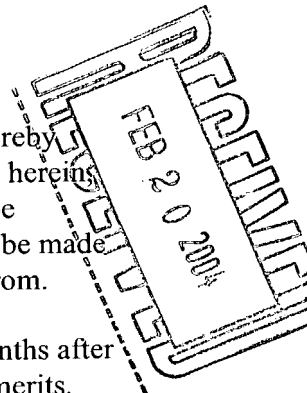
INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
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Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, Notice of Allowance or other action that closes prosecution (e.g., Quayle Action).
- ☒ a. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☒ 2. The references were cited in a counterpart foreign application. An English language version of the foreign search reports are attached for the Examiner's information.
- ☒ 3. English-language Abstracts of the non-English language references are attached hereto.



- ☒ 4. A computer-generated English translation of the following Japanese Patent Publication has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See References 6 and 7.

Respectfully submitted,



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JAO:GPS/jam

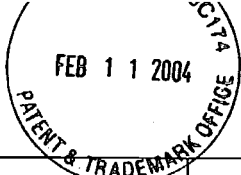
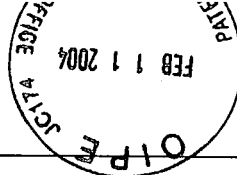
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		APPLICANT(S) Mitsumi KIMURA et al.			
		FILING DATE May 18, 1998		GROUP 2871	
U.S. PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	SUB CLASS
	1	5,438,241	08/01/1995	ZAVRACKY et al.	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)					
EXAMINER				DATE CONSIDERED	
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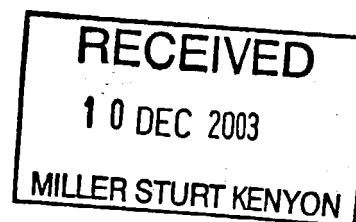
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Datum/Date
10.12.03

Zeichen/Ref./Réf. EPP12478C	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 03077468.1-2203-
Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire SEIKO EPSON CORPORATION	

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

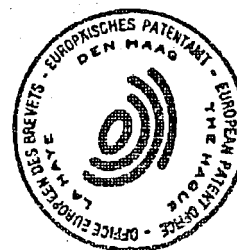
☒ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 9

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 438 241 A (MCCLELLAND ROBERT ET AL) 1 August 1995 (1995-08-01) * column 16, line 36 - column 17, line 7 * * column 18, line 27 - column 19, line 5 * * column 22, line 16 - line 21; figures 12,16A,16B,17L *	1,6	H01L51/40 H01L27/00 H05B33/12 G02F1/1333 G09F9/30 G09F9/00 H01L21/20
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The present search report has been drawn up for all claims

Place of search

THE HAGUE

Date of completion of the search

28 November 2003

Examiner

Stang, I

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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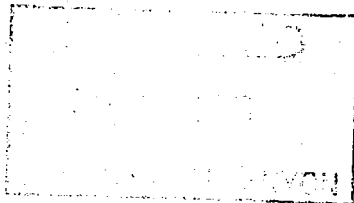
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Datum/Date

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Zeichen/Ref./Ref.

EPP12478B

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

03077361.8-2203-

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

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The following specifications given by the applicant have been approved by the Search Division:

☐ abstract

☒ title

☒ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

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REFUND OF THE SEARCH FEE

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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Y	PATENT ABSTRACTS OF JAPAN vol. 008, no. 183 (P-296), 23 August 1984 (1984-08-23) & JP 59 075205 A (SUWA SEIKOSHA KK), 27 April 1984 (1984-04-27) * abstract *	9,14	H05B G02F H01L
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		26 November 2003	Stang, I
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 03 07 7361

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26-11-2003

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ABSTRACT / ZUSAMMENFASSUNG / ABREGE

03077361.8

A method of manufacturing a matrix type display device comprising an optical material (114A) arranged at predetermined positions on a display substrate (121), the optical material being liquid at least when the optical material is applied to the predetermined positions. The method comprises the steps of enhancing the lyophilicity at each of the predetermined positions relative to the lyophilicity at a peripheral region (155) around a respective predetermined position of the predetermined positions and applying the optical material to the predetermined positions.